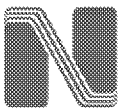

Nebraska Public Power District

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August 30, 2011

Paul Hoornaert, P.E.
Senior Project Manager
Sargent & Lundy, LLC
55 East Monroe Street
Suite 16D55
Chicago, IL 60603-5780

Subject: NPPD Transmittal 291 - Comments on Sargent & Lundy's Revised Cost Estimate

Reference: August 8, 2011 9:40 AM e-mail from Sargent & Lundy's Ms. Wayshalee Patel to NPPD's Mr. Bob Nitsch

Paul:

Attachment A to NPPD's Transmittal 291 contains another set of questions from District personnel working on modeling the cost impacts of various potential MPCE scenarios for Gerald Gentleman Station (GGS) that may be required due to recently issued and potential new environmental regulations. The District is requesting that appropriate S&L personnel provide responses to the questions contained in Attachment A to facilitate this analysis effort. Please address as many of the comments as possible by September 15, 2011.

Please contact me at GGS 308-386-5312 or via e-mail at bbnitsc@nppd.com with any questions or comments concerning the questions.

Bob Nitsch lmh

Bob Nitsch
GGS Project Engineering Leader

lmh

Attachments

c: John Meacham

T:\MPCE\PROJECT FILES\01.13 S&L ENGINEERING SERVICES AGREEMENT 4700000926\01.13.10 SUBMITTAL FORMS TO S&L\#291 LETTER 110725 - COMMENTS ON SL COST ESTIMATES - REV 2.DOCX

Gerald Gentleman Station
P.O. Box 68 / Sutherland, NE 69165-0068
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ATTACHMENT A

The following set of questions was submitted to Bob Nitsch via an August 18, 2011 4:08 PM e-mail from Mr. Tim Owens, who works for NPPD's Resource Planning and Risk Management Group. Mr. Owens' comments and questions pertain to information that was supplied by Sargent & Lundy's Ms. Wayshalee Patel via e-mail to Bob Nitsch on August 8, 2011 at 9:40 AM with responses to District questions pertaining to the cost inputs used for the GGS MPCE study.

General questions:

1) Are the estimates in the S&L document that you provided the final assumptions that we should be using for the GOA, or should we expect a revised version at the end of August? At least in the case of the capital cost estimate for a wet FGD (page 3 of the pdf), S&L implies that there will be a revision later this month.

2) In several places, S&L references an attached spreadsheet, which I believe you copied and included as part of the pdf document. Would it be possible to eventually get a copy of the final spreadsheet when it is available (see question 1)? I think this might help with transferring the information into the GOA model.

Specific questions:

1) I appreciated the summary table of Low/Base/High capital cost estimates for the MPCE options (pages 3 & 9 of the pdf document). Comparing the results to the information S&L provided on July 20, it looks as though these estimates reflect the combined cost for Units 1 & 2. Is it possible for S&L to provide the estimates separately for each unit?

2) In the discussion of heat rates on pages 4 & 5, S&L states "***However, there would be a change in heat rate due to the additional auxiliary power associated with the new MPCE. The cost associated with this change in heat rate was taken into account via the auxiliary power cost***". I want to verify that for purposes of the GOA, we **do not** want S&L to price out these aux. power costs in their O&M estimates, as our model will account for the change in heat rate directly. In order to do this, we would want to know what the estimated change in heat rate will be. I'm assuming that this information is reflected in the Net Plant Heat Rate information included in the spreadsheet (pages 12 -17 of the pdf document). I'm also assuming that these impacts are additive. For example, if I was modeling the combination of wet FGD (0.28% S) and SCR for Unit 1, the incremental net plant heat rate impact would be 232 + 83 = 315 Btu/kWh-net.

3) I noticed that the Variable O&M (VOM) estimates (page 10 of the pdf document) were provided on a $/gross MWh basis. Is it possible for S&L to adjust these to a net MWh basis? Alternatively, can I adjust them based on the simple ratio of gross to net plant output? I also noticed that S&L provided VOM estimates for the Status Quo as well as the various MPCE options, so how should we interpret the estimates? For example, the Baseline VOM cost for Unit 1, Status Quo, 0.28% S is $0.044/ (gross) MWh. The VOM cost for Unit 1, wet FGD, 0.28% S is $0.405 /(gross) MWh. So, is the incremental VOM associated with the wet FGD $0.405/(gross) MWh, or is it 0.405 – 0.044 = $0.361/(gross) MWh? I would guess it is the latter, but would appreciate some confirmation.

4) On pages 7 & 8 of the pdf, S&L discusses the impacts associated with installing MPC equipment on both units as a single project, vs. doing one and then the other separated by some extended time period. Two questions come to mind. First, I presume that the quantitative estimates S&L has provided so far reflect the scenario where MPCE is installed on both units as a single project, correct? Second, S&L includes some good descriptive information on the potential impacts, but is it possible for them to estimate an approximate quantitative impact. For example, if you install a wet FGD on one unit and then the other, the cost for the first unit would increase by say 50% vs. the single project estimate (because of common systems, etc.), but then the cost for the second unit would decrease by 35% vs. the single project estimate (because common systems are already in place, but erection costs increase, etc.). A ballpark estimate should be sufficient at this point. We are just trying to see if the overall cost differences between a single project vs. one at a time are significant.

5) We previously discussed having S&L provide an estimate for DSI, or other bridging technology, as an alternative to a full scrubber. The S&L included estimates are for a DRY FGD w/ Reinforcement in addition to a WET FGD. Does the DRY FGD represent this bridging technology, or is that information yet to come?